

### **Summer/Fall 2012 WIC Staff In-service:**

# **Implementation of WHO Growth Charts and Nutrition Risk Revisions**

### **Session Focus**

**Target Audience:** WIC Staff – certifiers and RD's

Session Goal: Prepare for the implementation of new WHO growth charts, NRC revisions in WISPr

### **Key Content Points:**

• Point 1: Introduction of WHO growth charts

• Point 2: Description of nutrition risk revisions

• Point 3: Plan for WISPr implementation

### **Session Objectives:**

- Objective 1: By the end of the in-service, the certifier/RD will be able to explain differences between the new WHO charts and the current CDC charts in WISPr
- Objective 2: By the end of the in-service, the certifier/RD will be able to describe revisions to existing nutrition risk criteria and identify the new nutrition risk criterion
- Objective 3: After WISPr implementation in October, the certifier/RD will successfully use the new WHO growth charts and use appropriate language for counseling
- Objective 4: By the end of the in-service, the certifier/RD will be able to describe updates to the RD Referral guidelines

## **Session Planning**

### **Materials Needed:**

- Power point presentation and Session Guide: Implementation of WHO growth charts and Related Risks for Infants and Children
- Handouts: Summary of Nutrition Risk Criteria Revisions, NRC 351 Inborn Errors of Metabolism, Practice



- Activity, Summary of RD Referral Table Updates
- Paper version of CDC Growth Charts Source WHO Child Growth Standards 1 boys chart and 2 girl charts for practice activity

**Preparation Needed**: Please review the in-service information below prior to sharing with staff. Contact Marie Collier at the State Office with questions: <a href="mailto:collierm@dhw.idaho.gov">collierm@dhw.idaho.gov</a> or (208) 334-5953

**Time Needed:** Two hours prior to October 1, 2012 release.

### **Session Outline**

#### **Facilitator notes:**

Additional resources:

- World Health Organization website: http://www.who.int/childgrowth/en/
- Centers for Disease Control and Prevention website: http://www.cdc.gov/growthcharts/who\_charts.htm
- MMWR article September 10, 2010:
  - http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5909a1.htm?s\_cid=rr5909a1\_w
    - Use of WHO and CDC Growth charts for Children aged 0 -59 months
- Pediatrics article; originally published online September 26, 2011:
  - http://pediatrics.aappublications.org/content/128/4/e786.full.pdf+html
    - Parental Perceptions of Weight Terminology That Providers Use With Youth

Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
2 min	<b>Opening the session</b> : Introduce topic, length of session, invite questions as they arise	
5 min	<ul> <li>Warm-up activity:</li> <li>What have you heard about the new World Health Organization (WHO) growth charts? (PPT slide 1)</li> </ul>	



Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
10 min	Activity 1: Current use of growth charts (PPT slides 2-3)	1
	• Background: Growth charts are a key tool used to interpret growth measurements. (PPT slide 2) Available in electronic or paper versions.	
	• Discuss together: How do you use growth charts ? (PPT slide 3) Monitor child's growth and weight gain, screen for growth concerns, identify weight issues, and assign nutrition risk. To explore what parents think about their child's growth on the graph. Identify times when the growth pattern shifts. Provide assurance that child's growth is on track, etc.	
	• When do you show growth charts to parents or guardians? When percentiles appear normal or unexpected? When it is requested by parents? To reinforce the counseling provided? Sharing growth charts is not a required element of a certification; growth charts are a tool that may be shared when helpful or useful.	
	• How do you describe the graphs to parents?  Graph lines represent a child's rate of growth or weight gain over time. The plot points illustrate measurements at a point in time and can be used as comparisons to the standard for each age. A series of points are helpful for noting trends. Use neutral terms when describing a child's placement on the graph such as "typical range for age", "usual pattern of growth" "growth curves above/ below expected".	
10 min	Activity 2: History and characteristics of WHO and CDC growth charts (PPT slides 4-10)	1
	• Which of these chart options (on PPT slide 4) are we currently using in WISPr? CDC.	



Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
	• Review definitions of reference vs. standard (PPT slide 5)	
	• Note differences between the data used for the CDC charts (PPT slide 6: cross sectional study of US children) and the data collected for the WHO charts (PPT slide 7-8): longitudinal study over a two year period with children who met specific criteria).	
	• What do you think about the growth patterns for children from different countries who were raised in optimal conditions ? (PPT slides 9-10): The WHO hypothesis held true; children will grow the same when living in optimal circumstances regardless of where they live. This is how the international growth standard was developed; it was based on how children normally grow when all factors support their best possible health.	
10 min	Activity 3: Implementation of the new WHO charts (PPT slides 11-12)	1, 3
	• What occurred as a result of the WHO research? (PPT slide 11) An expert panel met to determine the best use of these charts in the US. Their recommendation was to use the WHO charts from birth to 2 years and continue the use of CDC charts from 2 to 20 Years. This meant that care providers would have the best possible standards for young children and would only switch charts once at age two when they started measuring children standing up.	
	• USDA accepts this recommendation for WIC in 2010, provides guidance for implementation by 2012.	
	• Idaho implementation will occur October 1, 2012. (PPT slide 12) WISPr will continue to select and plot the appropriate graphs for age.	



Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
	Which charts will WISPr use?	
	<ul> <li>WHO for children from birth to 2 years of age</li> </ul>	
	o CDC BMI charts for children from 2 to 5 years	
	o For children equal to or greater than $(\geq)$ age 2 who cannot be measured standing	
	up staff will need to document an "inaccurate" measurement reason in WISPr	
15 min	Activity 4: Differences between CDC charts and WHO charts (PPT slides 13-19)	1, 3
	• What changes will we see? New cutoffs. (PPT slide 13) WHO growth standards	
	measured healthy children under optimal conditions so only children whose	
	measurements are above, below or just on the perimeters of the charts should be	
	considered at risk.	
	o WHO recommends cutoffs at the 2.3 <sup>nd</sup> and 97.7 <sup>th</sup> percentiles in WISPr. Computer	
	down paper chart versions use cutoffs at the 2 <sup>nd</sup> and 98 <sup>th</sup> percentiles for ease of	
	staff plotting.	
	o 5 <sup>th</sup> and 95 <sup>th</sup> percentiles will continue to be used with CDC growth charts for older children	
	• Other differences (PPT slide 14):	
	• Fewer infants will be below 5 <sup>th</sup> percentile on WHO weight-for-age charts	
	o Fewer infants/children will be identified as underweight or Failure to Thrive (FTT)	
	especially from 6 to 23 months	
	<ul> <li>More infants will be above 95<sup>th</sup> percentile on WHO weight-for-length</li> </ul>	
	o Formula-fed infants tend to gain weight more rapidly after 3 months and could be	
	identified as overweight.	
	<ul> <li>More infants will be below 5<sup>th</sup> percentile on WHO <u>length-for-age</u> charts</li> </ul>	
	o whole infants will be below 5 percentile on willo <u>length-for- age</u> charts	
	• Differences between the charts have impacted nutrition risk criteria (PPT slide 15)	



Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
	<ul> <li>Four NRC are being revised</li> <li>One NRC is being added</li> <li>Unrelated to WHO charts two NRC are being updated</li> </ul>	
	• Case Study: What are the differences between the CDC and WHO charts for this child ? (PPT slide 16-18) On the CDC chart, she is falling off of the graph and would be considered underweight. On the WHO chart, Sally is gaining weight at a normal rate.	
15 min	Activity 5: Risk changes (PPT slides 19-26)	2
	• Review Handout: Summary of WIC Risk Revisions for 2011	
	<ul> <li>WISPr will continue to automatically assign risk based on information entered on the health assessment anthropometrics data screen. (PPT slide 19)</li> </ul>	
	• Risk 103: Underweight Or At Risk Of Underweight (PPT slide 20) Note the new cutoffs. (PPT slide 21) RD referral is required.	
	• Risk 113: Obese and Risk 114: Overweight (PPT slides22-23) 113 has been renamed from "Overweight" and 114 has been renamed from "At Risk For Becoming Overweight". NRC 113 continues to require an RD referral. Both risks are based on BMI so are only available for children who have been measured standing up. Children from two to three years of age who need to be measured recumbently will need to have an "inaccurate" reason documented in WISPr.	
	• <b>Risk 115: High Weight for Length</b> (PPT slide 24) This is a new risk for infants and young children who are heavier than expected for their age and length. Assignment of this risk does not change the recommended counseling strategies where weight loss	



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	and food restriction is never recommended or encouraged. Recommendations focus on nutritious liquids/foods, movement/activity and growth gradually becoming more proportionate.	
	• <b>Risk 121: Short Stature</b> (PPT slide 25) Percentile cut offs have been adjusted for children who are graphed on the WHO chart.	
	• Risk 344: Thyroid Disorders (PPT slide 26) The definition of thyroid disorders has been expanded. NRC 344 continues to require an RD referral.	
	• <b>Risk 351: Inborn Errors of Metabolism</b> (PPT slide 27) The definition/justification of qualifying diagnosis' has been expanded (refer to actual NRC for extensive list). NRC 351 continues to require an RD referral.	
10 min	Activity 6: Talking about weight (PPT slides 28) Many of the risk changes we just discussed involve weight issues, especially over weight. These can be challenging conversations to have with parents	3
	• How do we talk about weight issues with parents? (PPT slide 28) Research shows that parents prefer neutral terms such as "growth curve pattern" to terms that could be viewed as offensive labels like "obese" or "fat".	
	• What questions would you ask to find out more about the child's family? Every child is influenced by their environment and family dynamics so consider family centered counseling strategies where topics such as family mealtimes and physical activity are discussed. "What is mealtime like in your family?" What type of active things does your family do together?" "How do you reward your children?" etc.	



Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
	• What language do you use for describing concerns about weight? (PPT 29) The words we use make a difference in how a parent hears/feels about what we say. Avoid describing children's weight with slang terms such as roly-poly, pudgy, fleshy, chunky, tubby, dumpy etc. Consider using neutral phrases such as monitor growth, growth pattern, assess growth, proportion of weight to height, etc. Open the conversation in a neutral way such as "let's explore what might be causing a change in his growth pattern" or "let's look at her growth pattern and see if anything's changing".	
5 min	Closing the PPT session: (PPT slides 30, 31) Summary and questions.  Understanding the new growth graphs and risk changes will help us successfully work with WIC families to promote positive health outcomes. Additional resources and materials are available. What additional questions do you have? Clarifications needed?	3
15 min	Using computer-down paper charts (CDC Source WHO Child Growth Standards) and the "Practice Activity Using Computer-Down Charts" handout, have staff plot the three case examples and answer the questions. Discuss the answers as a group.	3
15 min	RD Table Updates:  Review the "Summary RD Referral Table Updates" handout.  Why are changes being made to reduce routing charts to RDs?	4
	To allow more RD time for face-to-face interaction with participants; allow more RD appointment time	



Time	Learning activity: Key open ended questions, important concepts to cover	Objective covered
	<ul> <li>When there are significant nutrition concerns with these NRC it usually results in additional NRC being assigned that trigger an RD referral anyway</li> <li>Many of the NRC being routed to RDs are considered low risk criteria by other states within our region</li> <li>If staff see a participant with significant concerns, staff always have the option to route the chart or schedule the participant with an RD (regardless of the RD Referral Table guidelines)</li> <li>Any questions? Thank youyour participation was appreciated!</li> </ul>	

## Facilitator review:

• If you have feedback or questions about this staff in-service, please contact Marie Collier at <a href="mailto:collierm@dhw.idaho.gov">collierm@dhw.idaho.gov</a> or (208) 334-5953

